



Bihar Rural Road
Development Agency



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar



मुख्यालय: राय बड़क चौक, गीता

BIHAR RURAL ROAD DEVELOPMENT AGENCY (BRRDA)

F.D.R. PART - A (2021 - 22)

DETAILED ESTIMATE FOR F.D.R. RESTORATION WORK



T. S. COPY

DISTRICT :

BHAGALPUR

BLOCK :

ISMILEPUR

NAME OF ROAD :

**KALI MANDIR MIDDLE SCHOOL DIMHA NARAYANPUR TO
PRIMARY SCHOOL NARAYANPUR DIMHA**

TOTAL LENGTH OF ROAD		:	1.800	KM
TOTAL COST OF FDR PART-A		:	26.567	LAKH
GST @ 12 %		:	3.188	LAKH
LABOUR CESS @ 1 %		:	0.266	LAKH
SEIGNIORAGE FEE @ 10 %		:	1.632	LAKH
TOTALCOST OF RESTORATION WORK		:	31.653	LAKH

Submitted By:-

EXECUTIVE ENGINEER

Rural Work Department
Works Division, Naugachhia

—: प्रतिवेदन :—

पथ का नाम :— Kolis Mandir Middle School Dimha Narayanpur TO
प्रखण्ड का नाम :—ईस्माईलपुर। Primary School Narayanpur Dimha.

प्रमंडल :—ग्रामीण कार्य विभाग, कार्य प्रमंडल, नवगछिया।

अंचल :—ग्रामीण कार्य विभाग, कार्य अंचल, भागलपुर।

पथ की लंबाई :— 1.80 K.M

क्षतिग्रस्त पथ की लंबाई :—

प्राक्कलित राशि :— 31.653 Lakh

प्रस्तुत प्राक्कलन वर्ष 2021 में आई बाढ़/अतिवृष्टि से क्षतिग्रस्त पथों की तत्काल मरम्मत कर, यातायात पुनः बहाल करने हेतु प्राक्कलन तैयार किया गया है। प्राक्कलन का निर्माण अभियंता प्रमुख, ग्रामीण कार्य विभाग, बिहार, पटना के पत्रांक—मु0अ0—(मु0) विविध (कार्य) 23-291/2019-4275 दिनांक—22.10.2021 के आलोक में अधीक्षण अभियंता, ग्रामीण कार्य विभाग, कार्य अंचल, भागलपुर के ज्ञापांक—822 दिनांक—25.10.2021 के आदेश एवं कार्यपालक अभियंता, नवगछिया के आदेश के अनुपालन में तैयार किया गया है।

माह अगस्त—अक्टूबर—2021 को बाढ़ के कारण जगह—जगह पर रोड क्रस्ट में कटाव के साथ—साथ पथ का फलैंक भी क्षतिग्रस्त होने से बचाने हेतु कार्य किया गया है।

अतः आपातकालीन प्रकृति के कार्य को देखते हुए इस क्षतिग्रस्त पथांश में आवश्यकता एवं उपलब्धतानुसार ईंट के टुकड़े (Brick Bats/Sand Bag/NC Bag इत्यादि) के द्वारा पथ के पुर्नस्थापन का प्रावधान किया गया है। प्राक्कलन में मर्दों का दर वर्तमान अनुसूचित दर विश्लेषण पर आधारित है। प्राक्कलन में Contractor Profit and Over head charge नहीं जुड़ा हुआ है। S.F. का प्रावधान करते हुए GST and Labour Cess को जोड़ा गया है।

अतः प्राक्कलन का तकनीकी अनुमोदन अपेक्षित है।

Unil
25/10/22

कनीय अभियन्ता
ग्रामीण कार्य विभाग
कार्य प्रशाखा, ईस्माईलपुर

Sanjiv
25/10/22

सहायक अभियन्ता
ग्रामीण कार्य विभाग
कार्य अवर प्रमंडल, ईस्माईलपुर

R. S. Singh
25/10/22

कार्यपालक अभियन्ता
ग्रामीण कार्य विभाग
कार्य प्रमंडल, नवगछिया।

Inspection Report for Flood Damage Work

Date :-

Est. Cost. - Rs. 31.653 Lakh.

1. Name of PIU :- R.W.D., Works Division, Navgachhiya

2. Name of Block/Road :- 1.5 MILE PUR / Kali Mandir Middle School Dimha Narayanpur to Primary School Narayanpur Dimha.

(A) For Road :-

1. Damage Location/Chainage :- CH-0-65m, 91-104m, 225-233m, 369-376m, CH-376-421m, 421-500m, 613-634m, 772-924m, CH-924-998m.
2. Damage Length :- 65m, 13m, 8m, 7m, 45m, 79m, 21m, 91m, 74m, Total - 403 M.
3. Nature of Damage :- Erosion by flood water.
4. Details of Restoration works :-
(i) Material being used in Restoration works :- Local sand & Brick Bats.
(ii) Equipment's/Tools being used in Restoration works :-
(iii) Procedure taken up in Restoration works :-
(iv) Restored Length :- 403 M

(B) For Bridge :-

1. Damage Location/Chainage :-
2. Damage Length :-
3. Nature of Damage :-
4. Details of Restoration works :-
(i) Material being used in Restoration works :-
(ii) Equipment's/Tools being used in Restoration works :-
(iii) Procedure taken up in Restoration works :-
(iv) Restored Length :-

(C) Requirement of New CD/Bridge :-

- (i) Name of Road :- Kali Mandir Middle School Dimha Narayanpur to Primary School Narayanpur Dimha.
(ii) Location/Chainage :- 1150 M
(iii) Type of CD work /length required :- 2 span of 5 M x 3 M each.

NOTES :-

- Upload one photograph of damage portion if available.
- Attach minimum two photographs (during restoration & after restoration) photographs should be Geotags and at least one photo be captured in selfie mode.
- Restoration work has been done during flood season, but at present exact measurement can't be possible as per actual work done.

(Motorable work found Satisfactory)

29/4/22
S.E

29/4/22

Signature of JE/AE/EE
Executive Engineer
R. W. D. W. D. Naugachia

Signature

(Name of Inspection)

29/4/22
A.E

29/4/22
A.E

02/05/22
AR

GENERAL ABSTRACT OF COST

Name of Road : KALI MANDIR MIDDLE SCHOOL
DIMHA NARAYANPUR TO
PRIMARY SCHOOL NARAYANPUR
DIMHA District : BHAGALPUR

Length (Km) : 1.800 Block : ISMILEPUR

Sl. No	Particulars		Details (Km)	Total Cost (in Rs.)
1	Cost of Road Restoration work	:	1.800	26,56,700.00
2	Add G.S.T @ 12 %	:		3,18,804.00
3	Add L.C. @ 1 %	:		26,567.00
4	S. F. @ 10 %	:		1,63,224.00
	Total Cost of Restoration work	:		31,65,295.00
			Say,	31,65,295.00

Vijay
25/01/22
J. E.

Sanjay
25/01/22
A. E.

R. T.
25/01/22
E. E.

Post facto Technically sanctioned for Rs - 31.653 Lacs (Rupees thirty one lac sixty five thousand three hundred) only.

ACy
Superintending Engineer
Rural Works Department
Works Circle, Bhagalpur
KS
12/07/22
Sanjay
12/07/22

ESTIMATE FOR ROAD RESTORATION WORK

Name of Road: KALI MANDIR MIDDLE SCHOOL DIMHA
NARAYANPUR TO PRIMARY SCHOOL
NARAYANPUR DIMHA

Block: ISMILEPUR

District: BHAGALPUR Length : 1.800 Km

Sl. No.	SSR Item No.	Description	No	Length (M)	Width (M)	H/D (M)	Qty.	Unit	Rates (in Rs.)	Amount (in Rs.)
1	4.5	Providing brick bats including spreading laying hand packing and compacting with C.I. Hammer in layers not exceeding 75 mm thick including cost of light, barriers, danger signals, chowkidar, taxes, royalty etc. all complete job as per specification and direction of E/I excluding carriage cost of bricks.								
		As per attached " Annexure - A "					1521.96			
							1521.96	Cum	1677.54	25,53,149.00
2	11.1	Local Sand filling as per drawing and technical specification Clause 305.3.9								
			0	2.50			0.00			
		As per attached "Annexure - B"					230.00	Cum	450.22	1,03,551.00
							Total Cost of Flood Protective work =			26,56,700.00

Verified
25/01/22
J. E.

Done
25/01/22
A. E.

Revised
25/01/22
E. E.

ANNEXURE - " A "

Brick Bat Measurement

Name of Road : KALI MANDIR MIDDLE SCHOOL DIMHA NARAYANPUR TO PRIM Length (Km) : 1.800

Sr. No.	Chainage (m)	Nos.	Length (m)	Width (m)			Average Width (m)	Depth (m)			Average Depth (m)	Quantity (Cum)
1	0 - 65	2	7.70	0.50	1.00		0.75	1.50			1.50	17.33
2		1	10.00	4.00	7.00		5.50	1.00	3.00		2.00	110.00
2		1	15.00	4.00	6.00		5.00	1.00	2.50		1.75	131.25
3		1	15.00	4.00	7.50		5.75	2.50	1.50		2.00	172.50
4		1	18.00	5.00	6.50		5.75	0.90	1.80		1.35	139.73
5	91- 104	1	13.00	2.50			2.50	0.30			0.30	9.75
6	225 - 233	1	8.00	2.50			2.50	0.45			0.45	9.00
7	369 - 376	2	7.00	0.60			0.60	0.45	0.60		0.53	4.45
8	376 - 421	2	45.00	0.60			0.60	0.50	0.80		0.65	35.10
9	421 - 481	1	60.00	2.70			2.70	0.30	0.60		0.45	72.90
10	481 - 491	1	10.00	3.90	8.00		5.95	1.50	3.50		2.50	148.75
11	491 - 500	1	9.00	2.50			2.50	0.50			0.50	11.25
12	613 - 634	1	6.00	2.00			2.00	1.00	2.50		1.75	21.00
13		1	15.00	3.70	5.50		4.60	2.50	3.00		2.75	189.75
14	924 - 939	1	15.00	3.00			3.00	0.60	1.20		0.90	40.50
15	939 - 961	1	22.00	3.10	4.00		3.55	1.60	2.50		2.05	160.11
16	961 - 998	1	15.00	4.50	6.00		5.25	1.80	1.10		1.45	114.19
		1	20.00	4.50	6.00		5.25	1.10	0.90		1.00	105.00
		1	7.00	4.50	6.00		5.25	0.90	0.70		0.80	29.40
Total =												1521.96

S. F.	-	1521.96	Cum	@	Rs.	1051.00	x	10%	=	Rs.	1,59,958.00
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Vijay
25/01/22
J. E.

Sanjay
25/01/22
A. E.

R.P.
25/01/22
E. E.

ANNEXURE - " B "

Local Sand Measurement

Name of Road : KALI MANDIR MIDDLE SCHOOL DIMHA NARAYANPUR TO PRIMARY
SCHOOL NARAYANPUR DIMHA

Length (Km) : 1.800

Sr. No.	Chainage (m)			Nos.	Length (m)	Width (m)			Average Width (m)	Depth (m)			Average Depth (m)	Quantity (Cum)
1	772	-	833	1	60.00	3.00	4.00		3.50	0.50	0.80		0.65	136.50
2	893	-	924	1	31.00	3.00	4.50		3.75	0.60	1.00		0.80	93.00
													Total =	230

	S. F.	-	230.00	Cum	@	Rs.	142.00	x	10%	=	Rs.	3,266.00
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Vijl.
25/01/22
J. E.

Sanjay
25/01/22
A. E.

R. M.
25/01/22
E. E.

Carriage Cost of Material via Road

RWD, works Division, Bhagalpur

Name of Road :		KALI MANDIR MIDDLE SCHOOL DIMHA NARAYANPUR TO PRIMARY SCHOOL ISMILEPUR													
Sl No	Item	Unit	Source	Carriage Cost & Lead in Km						Katcha			Loading & Unloading Cost	Carriage By Road	Total
				Pucka / Surface											
				8.00	x 7.47	x 85 Km	= Rs 1106.67	8.00	x 18.09	x 0 Km	= Rs 0.00	193.62	1300.29	1300.29	
1	Stone Metal Gr-II/Via Road	Cum	Mirza Cheuki	4.59				4.59							
2	Stone Metal Gr-III / GSB Via Road	Cum	Mirza Cheuki	8.00	x 7.47	x 85 Km	= Rs 1017.96	8.00	x 18.09	x 0 Km	= Rs 0.00	193.62	1211.58	1211.58	
3	Stone Aggregate / Chips Via Road	Cum	Mirza Cheuki	4.99				4.99							
4	Stone Boulder /Via Road	Cum	Mirza Cheuki	8.00	x 7.47	x 85 Km	= Rs 1017.96	8.00	x 18.09	x 0 Km	= Rs 0.00	193.62	1211.58	1211.58	
5	Coarse Sand/Via Road	Cum	Hanbara	4.80	x 7.47	x 85 Km	= Rs 1058.25	8.00	x 18.09	x 0 Km	= Rs 0.00	193.62	1251.87	1251.87	
6	Mooram/Via Road	Cum	Mirza Cheuki	8.00	x 7.47	x 61 Km	= Rs 730.53	8.00	x 18.09	x 0 Km	= Rs 0.00	104.88	835.41	835.41	
7	Bitumen Barauni/ Via Road	Cum	Mirza Cheuki	4.99				4.99							
8	Bitumen Barauni/ Via Road	MT	Barauni	8.00	x 7.47	x 85 Km	= Rs 846.60	8.00	x 18.09	x 0 Km	= Rs 0.00	104.88	951.48	951.48	
9	Bitumen Emulsion /Via Road	MT	Fatuha	6.00	x 7.47	x 139 Km	= Rs 1038.33	8.00	x 18.09	x 0 Km	= Rs 0.00	365.00	1403.33	1403.33	
10	Local Sand	Cum	Local	8.00	x 7.47	x 2 Km	= Rs 23.95	8.00	x 18.09	x 0 Km	= Rs 0.00	365.00	2165.27	2165.27	
11	Brick	1000 Nos	Local	8.00	x 7.47	x 2 Km	= Rs 209.16	8.00	x 18.09	x 1 Km	= Rs 29.00	104.88	157.83	157.83	
12	Cement	MT	Local	2.00	x 7.47	x 7 Km	= Rs 52.29	8.00	x 18.09	x 1 Km	= Rs 72.36	441.62	723.14	723.14	
13	Steel	MT	Local	8.00	x 7.47	x 7 Km	= Rs 52.29	8.00	x 18.09	x 0 Km	= Rs 0.00	317.64	369.93	369.93	
14	Hume Pipe (1000 mm)	M	Godda	8.00	x 7.47	x 7 Km	= Rs 52.29	8.00	x 18.09	x 0 Km	= Rs 0.00	337.70	389.99	389.99	
15	Hume Pipe (600 mm)	M	Godda	8.00	x 7.47	x 96 Km	= Rs 573.70	8.00	x 18.09	x 0 Km	= Rs 0.00	75.69	649.39	649.39	
16	Hume Pipe (300 mm)	M	Godda	10.00	x 7.47	x 96 Km	= Rs 229.48	8.00	x 18.09	x 0 Km	= Rs 0.00	32.44	261.92	261.92	
17	Bamboo	Nos	Kursela	25.00	x 7.47	x 96 Km	= Rs 95.62	8.00	x 18.09	x 0 Km	= Rs 0.00	32.44	128.06	128.06	
18	Brick bats	Cum	Local	60.00	x 7.47	x 42 Km	= Rs 313.74	8.00	x 19.82	x 0 Km	= Rs 0.00	317.64	369.93	369.93	
19	Klin Rubbish	Cum	Local	8.00	x 7.47	x 7 Km	= Rs 209.16	8.00	x 18.09	x 1 Km	= Rs 72.36	193.62	1300.29	1300.29	
20		Cum	Local	2.00	x 7.47	x 7 Km	= Rs 209.16	8.00	x 18.09	x 1 Km	= Rs 72.36	104.88	157.83	157.83	

25/01/22
Junior Engineer

25/01/22
Assistant Engineer

25/01/22
Executive Engineer

Superintending Engineer
Rural Works Department
Works Circle, Bhagalpur

Rate Analysis

SDB Sl. No.	DESCRIPTION	Unit	QTY	Rate	Amount in Rs
4.5	Providing and Laying of Brick Bats				
	Placing tractor at loading point loading with front end loader dumpoing ,turning for return trip excludng time for haulage and return tirp				
	Unit = cum				
	Taking output = 2.832 cum				
a)	Labour				
	Mazdoor (Unskilled)	day	2.17	292	633.64
b)	Materilas				
	Brick Bats	cum	2.832	1,051.00	2976.43
c)	Carriage				
		cum	2.832	402.80	1140.73
	Cost for 5.5 cum = a+b+c				4750.80
	Rate per cum = (a+b+c+d)/2.832	cum			1677.54
	Total per cum	cum			1,677.54
5.7.9	Labour for fitting and fixing 62 mm to 75 mm dia bamboo runners in position at every verticle pile with 150 mm long nails or 38 swg G. I. wire including cost of G.I. or nails complete job as per specification and direction of E/I				
	Unit = Per mt.				
	Taking Out Put = 30.50 m				
(i)	Materials				
	Cost of 150 mm long nails	Kg	0.50	61.74	30.87
(ii)	Labour				
	Carpenter Gr -II	No.	0.125	351	43.88
	Unskilled Labour	No.	0.25	292	73.00
	Rate for 30.5 m				147.75
					147.75
	Rate for 1 m				4.84
(iii)	Bamboo(2nd class) 75mm dia, 1.8 - 2.5m long	m	1.00	23.58	23.58
	Rate per m			Say.	28.43
5.7.7	Labour for cutting 62 mm to 75 mm dia bamboo piles in size and making shoes and driving etc. complete bob as per specification and direction E/I.				
	Unit = Per m				
	Taking Out Put = 30.50 m				
	Assurning				
	20 no pile sunk 1.525 m deeps				
	Total depth sunk 30.50 m				
(i)	Labour				
	Carpenter Gr -II	No.	0.25	351	87.75
	Unskilled Labour for piling	No.	2.50	292	730.00
					817.75
	Rate for 30.5 m				817.75
	Rate for 1 m				26.81
(ii)	Bamboo(2nd class) 75mm dia, 1.8 - 2.5m long	m	1.00	23.58	23.58
	Rate per m			Say.	50.39
5.7.8	Labour for fitting and and fixing split bamboo woven chachari in position with 20 swg G.I. wire of 75 mm to 100 mm long nails alternatively including cost of G.I. wire or nails complete job as per specification and direction of E/I.				
WRD	(Assuming strip of 3.05x3.05 = 9.30 sqm				
	Unit = per sqm				
	Taking Out = 9.30 sqm				
a	Labour				

	Carpenter Gr -II	No.	1.00	351	351.00
	Mazdoor (Unskilled) for pilling	No.	1.00	292	292.00
b	Materials				
	75 mm to 100 mm long nails	kg	0.25	61.74	15.44
c	Bamboo(2nd class) 75mm dia, 1.8 - 2.5m long	m	11	23.58	259.42
					917.85
	Rate Per Sqm = (a+b+c)/9.30				98.69
10.7.40 WRD	Labour for filling Cement Bag, swing and laying materilas Unit = Per Bag				
A	Supply Empty cement Bag with Sand(92.92+4.82)	No	100	7.74	774.00
	Stiching Roll (Nylon)	No	2	30.00	60.00
				Total (A)	834.00
B	Unskilled Labour for filling stiching and staking	No	1.67	292	487.64
	Unskilled Labour for carrying and Placing at work site	No	3	292	876.00
	Skilled Labour for stiching	No	0.33	370	122.10
	Total per bag			Total (B)	1,485.74
C	Hire charge of Machine				
	Hire charge of Stiching Machine	No	0.33	50	16.50
	Hire charge of Generator 3 K.V.A	No	2.67	74	197.58
	Total per bag			Total (C)	214.08
D	Carriage Cost of Local Sand				
	1.2 Cft = 0.034 m ³	cum	3.40	157.83	536.62
				Total (D)	536.62
	Total cost of (A+B+C+D) =	Bag			3,070.44
	Rate per Bag				30.70
11.1	Local Sand filling as per drawi8ng and tecnical specification Clause 305.3.9				
	Unit = cum				
A	Labour				
	Mate	day	0.01	304	3.04
	Mazdoor (Unskilled)	day	0.30	292	87.60
	Total per bag			Total (A)	90.64
B	Material				
	Sand (assuming 20 per cent voids)	No	1.2	142	170.22
				Total (B)	170.22
	Rate per Cum =			Total (A+B)	260.86
C	Carriage Cost of Local Sand				
	Sand (assuming 20 per cent voids)	cum	1.20	157.80	189.36
				Total (C)	189.36
	Total cost of (A+B+C) =	Bag			450.22

Usp.
25/01/22
J.E.

20.0.1
A.E. 25/01/22

R. 25/01/22
E.E.